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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,707	07/03/2001	Thomas Zickell	NEI-010XX 2439	
7	590 06/22/	6	EXAMINER	
Bourque & Associates, P.A. Suite 303			AUGHENBAUGH, WALTER	
835 Hanover S	treet		ART UNIT	PAPER NUMBER
Manchester, NH 03104			1772	
			DATE MAILED: 06/22/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	<del>(, -</del>
	09/898,707	ZICKELL, THOMAS	S
Office Action Summary	Examiner	Art Unit	
	Walter B. Aughenbaugh	1772	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	iress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this cor D (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 12/16	<u>6/05,4/05/06,4/07/06</u> .		
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.		
3) Since this application is in condition for allowar			merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 21-44 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 21-44 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 10.	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CF	•
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of the priorical strain of the priorical strains.</li> </ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National S	Stage
Attachment(s)			
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite	-152)

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## **DETAILED ACTION**

# Acknowledgement of Applicant's Amendments

1. Applicant's amendments in claims 21, 30-33, 42 and 43 in the Amendment filed April 7, 2006 (Amdt. G) have been received and considered by Examiner.

#### Election/Restrictions

2. The restriction requirement made of record in paragraph 3 of the previous Office Action mailed November 16, 2005 has been withdrawn due to Applicant's amendments in claims 21 and 32 in Amdt. G (regarding the basis for restriction between Groups II and I and between Groups II and III) and due to Applicant's arguments on page 10 of Amdt. G. (regarding the basis for restriction between Groups III and I).

#### WITHDRAWN REJECTIONS

3. The 35 U.S.C. 112 rejection of claims 21, 22 and 30 made of record in paragraph 7 of the previous Office Action mailed November 16, 2005 has been withdrawn due to Applicant's amendments in claims 21 and 30 in Amdt. G.

#### **NEW REJECTIONS**

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 21 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 21, the recitation "a first region having a first layer of a second asphalt composition contacting an upper surface of said first region and a second layer of an adhesive composition contacting a lower surface of said first region" renders the claim indefinite since it cannot be ascertained how a layer that is a component of a region would contact the upper surface of that region, since the only thing that would contact that region would be something that is not a component of that region, and the same logic applies to the "contacting a lower surface of said first region" recitation.

In regard to claim 32, the recitation "said upper surface of said first region" (lines 17-18) renders the claim indefinite since, because "said upper surface of said first region" lacks antecedent basis, it cannot be ascertained whether Applicant intends to refer to the upper surface of the substrate recited in line 8 of the claim or to the upper surface of only the first region, and the recitation "said lower surface of said first region" (lines 19-20) renders the claim indefinite since, because "said lower surface of said first region" lacks antecedent basis, it cannot be ascertained whether Applicant intends to refer to the lower surface of the substrate recited in line 8 of the claim or to the lower surface of only the first region. Furthermore, the recitation "a second region disposed" (line 21) renders the claim indefinite since it is unclear how a region would be "disposed", particularly a region that is not recited as comprising any components.

#### Claim Rejections - 35 USC § 102

6. Claims 21, 22, 24, 29, 32-34, 36, 41 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Simpson et al. (USPN 5,096,759).

In regard to claim 21, Simpson et al. teach a rolled roofing material comprising a substrate saturated with a first asphalt composition (impregnated mat, item 92, col. 5, lines 34-

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62). Simpson et al. teach that the substrate includes a first region having a first layer of a second asphalt composition (coating, item 24, col. 3, lines 25-29 and col. 4, lines 36-39) contacting an upper surface of the substrate in that first region. Simpson et al. teach that the first region includes a second layer of an adhesive composition (adhesive, item 94, col. 5, lines 48-62) contacting a lower surface of the substrate in that first region. Simpson et al. teach that the substrate includes a second region disposed along at least a first edge of the substrate (edge of substrate 92, Fig. 9) where the second region has an upper and a lower surface (the upper portion of the edge of substrate 92 and the lower portion of the edge of substrate 92) that are both free of both the first and second asphalt compositions. Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach that the substrate includes a release backing (release paper, item 96, col. 5, lines 48-62) disposed over a bottom surface of the second layer (adhesive, item 94).

In regard to claim 32, Simpson et al. teach a roofing system (Fig. 11) comprising a first roofing membrane including a first, generally elongated rectangular substrate saturated with a first asphalt composition (impregnated mat, item 92, col. 5, lines 36-62). Simpson et al. teach that the substrate includes an upper and a lower surface having a top edge region and a bottom edge region whereby when the first roofing membrane is applied to the roofing support the lower surface is disposed closer to the roofing support than the upper surface, and the bottom edge region is disposed closer to the roof base of the roofing support than the top edge region (col. 5, lines 48-62 and Fig. 9-11). Simpson et al. teach that the substrate includes a first region having a

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first layer (coating, item 24) of a second asphalt composition that contacts the upper surface of the first region and a second layer (adhesive, item 94, col. 5, lines 48-62) of an adhesive composition that contacts the lower surface of the first region, where the region where coating, item 24, and adhesive, item 94, are located corresponds to the first region as claimed (the first layer contacts the upper surface of the first region and the second layer contacts the lower surface of the first region because the first region is the region where coating, item 24, is located, Fig. 1 and 9-11). Simpson et al. teach that the substrate includes a second region disposed along at least the top and bottom edge regions of the substrate (the region at the left edge of the substrate as shown in Fig. 11 where the right edge of each unit of underlayment, item 90, overlaps with and contacts the left edge of the next underlayment, item 90, as shown in Fig. 11) where the upper and lower surfaces of the substrate are substantially free of the first and second asphalt compositions, since the upper surface of the substrate at the second region does not contact coating, item 24 and since the lower surface of the substrate at the second region does not contact an asphalt composition (Fig. 1 and 9-11). Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach an adjacent roofing membrane substantially the same as the first roofing membrane (col. 5, lines 36-62 and Fig. 11) where the adhesive composition of the adjacent roofing membrane is adapted to adhere to the upper surface of the second region of the first roofing membrane such that only the granules of the first and adjacent roofing membranes are exposed to the environment when the first and adjacent roofing membranes are applied to the roofing support since the adhesive of Simpson et al. bonds to the underlayment, item 90, and

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coating, item 24 (col. 5, lines 55-62). It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. *In re Hutchinson*, 69 USPQ 138. The recitation "for use with a pitched roof... roof base" in lines 1-3 of claim 32 is an intended use phrase that has not been given patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQd 1647 (1987). The recitations "when... top edge region" and "adapted to... when... roofing support" in lines 9-14 and 29-34, respectively, are optional limitations due to the "when" term in these recitations.

In regard to claims 22 and 34, Simpson et al. teach that the rolled covering material further includes a parting agent covering (the silicon compound release coating, col. 3, lines 32-35) substantially covering the lower surface of the substrate wherein the parting agent necessarily resists adhering to the upper surface of the substrate when the covering material is rolled since it is a release coating.

In regard to claim 33, Simpson et al. teach that substantially only the lower surfaces of the first regions of the first and adjacent roofing membranes contact the roof (Fig. 11 and col. 5, lines 55-57: Simpson et al. teach that the adhesive 94 contacts the roof surface).

In regard to claims 24 and 36, Simpson et al. teach that the substrate includes non-woven polyester (col. 5, lines 48-50), which is a fibrous material.

In regard to claims 29 and 41, Simpson et al. teach that the adhesive composition includes a rubberized asphalt material (col. 6, lines 21-34; styrene-butadiene radial block polymer is a rubber).

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In regard to claim 44, Simpson et al. teach a roofing material comprising a substrate saturated with a first asphalt composition having an upper and a lower surface (impregnated mat, item 92, col. 5, lines 34-62). Simpson et al. teach that the roofing material comprises a first layer of a second asphalt composition (coating, item 24, col. 3, lines 25-29 and col. 4, lines 36-39) contacting only a first portion of the upper surface of the substrate (col. 5, lines 48-62). Simpson et al. teach that the first layer (coating, item 24) does not contact at least a first region of the upper surface of the substrate (impregnated mat, item 92) disposed along at least a first edge of the substrate (col. 5, lines 36-62 and Fig. 1 and 9-11), where the first region is where the right edge of each unit of roofing, item 10, overlaps with and contacts the left edge of the next roofing, item 10, as shown in Fig. 11. Simpson et al. teach that the roofing material comprises a second layer of an adhesive composition (adhesive, item 94, col. 5, lines 48-62) contacting only a second portion of the lower surface of the substrate (col. 5, lines 36-62 and Fig. 9-11) where the second layer does not contact at least a second region of the lower surface disposed along the first edge of the substrate (the first edge is where the right edge of each unit of roofing, item 10, overlaps with and contacts the left edge of the next roofing, item 10, as shown in Fig. 11, since Applicant recites "said first edge" in line 12 of the claim, which has antecedent basis in "a first edge" recited in line 7. Simpson et al. teach that granules contact an outer surface of the first layer (coating, item 24) because the first layer contacts substrate 92, substrate 92 is impregnated with asphalt, and asphalt comprises bitumen (col. 4, lines 35-37 and col. 5, lines 48-62). Simpson et al. teach that a release backing (release paper, item 96) is disposed over a bottom surface of the second layer (adhesive, item 94) (col. 5, lines 48-62).

#### Claim Rejections - 35 USC § 103

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7. Claims 30 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. (USPN 5,096,759).

Simpson et al. teach that the adhesive composition includes by weight 13% styrene-butadiene block polymer, 12% sand (filler), 7% oil and 63% bitumen (flux asphalt, col. 4, lines 35-39). Normally, it is to be expected that minor changes in the relative amounts of rubber, filler, oil and asphalt in an asphalt based adhesive would be an unpatentable modification. Under some circumstances, however, changes such as a change to the relative amounts of rubber, filler, oil and asphalt in an asphalt based adhesive may impart patentability to an article if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

8. Claims 25-28, 37-40, 31 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. (USPN 5,096,759) in view of Kennepohl et al. (USPN 4,079,158).

Simpson et al. teaches the material as discussed above.

In regard to claims 25 and 37, Simpson et al. fail to teach that the substrate is a fiberglass mat. Kennepohl et al., however, disclose a rolled roofing material comprising a substrate having upper and lower surfaces (backing, col. 1, line 39) where an asphalt composition saturates the substrate (col. 1, lines 38-48 and col. 3, line 65-col. 4, line 5). Kennepohl et al. teach that the substrate is a fiberglass mat (col. 8, line 66-col. 9, line 16). Therefore, one of ordinary skill in the art would have recognized to have replaced the non-woven polyester mat of Simpson et al. with the fiberglass mat of Kennepohl et al. since fiberglass mats are well known materials for use as an asphalt-saturated substrate for rolled roofing material as taught by Kennepohl et al.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the non-woven polyester mat of Simpson et al. with the fiberglass mat of Kennepohl et al. since fiberglass mats are well known materials for use as an asphalt-saturated substrate for rolled roofing material as taught by Kennepohl et al.

In regard to claims 26 and 38, Simpson et al. fail to explicitly teach that the first and second asphalt compositions are the same. Kennepohl et al., however, disclose that the asphalt composition that saturates the substrate is also coated on the upper surface of the substrate (col. 1, lines 38-48 and col. 3, line 65-col. 4, line 5). Therefore, one of ordinary skill in the art would have recognized to have used the same asphalt composition as both asphalts of Simpson et al. since it is well known to use the same asphalt composition that saturates the substrate as a coating on the upper surface of the substrate in roofing material as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the same asphalt composition as both asphalts of Simpson et al. since it is well known to use the same asphalt composition that saturates the substrate as a coating on the upper surface of the substrate in roofing material as taught by Kennepohl et al.

In regard to claims 27 and 39, Simpson et al. teach that the asphalt composition includes a mineral filler (silica sand, col. 4, lines 45-46). Simpson et al. fail to explicitly teach that the asphalt compositions include an oxidized asphalt, Kennepohl et al. teach that oxidized asphalt (col. 7, lines 36-55) with a mineral filler (col. 1, lines 20-48) is a notoriously well known noncombustible material for use as roofing. Therefore, one of ordinary skill in the art would have recognized to have oxidized the asphalt composition of Simpson et al. since oxidized asphalt is a well known noncombustible material for use as roofing as taught by Kennepohl et al.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have oxidized the asphalt composition of Simpson et al. since oxidized asphalt is a well known noncombustible material for use as roofing as taught by Kennepohl et al.

In regard to claims 28 and 40, Simpson et al. fail to teach that the mineral filler is limestone. Kennepohl et al. teach that the asphalt composition includes limestone as the mineral filler (col. 5, line 62-col. 6, line 3). Therefore, one of ordinary skill in the art would have recognized to have used limestone as a mineral filler in the asphalt of Simpson et al. since limestone is a well known filler for noncombustible material for use as roofing as taught by Kennepohl et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used limestone as a mineral filler in the asphalt of Simpson et al. since limestone is a well known filler for noncombustible material for use as roofing as taught by Kennepohl et al.

In regard to claims 31 and 43, while Kennepohl et al. and Simpson et al. fail to explicitly teach that the first asphalt composition and the second asphalt composition each have a fuel content wherein the fuel content of the asphalt compositions is low enough such that the asphalt compositions are fire resistant, Kennepohl et al. teach that the composite building material of Kennepohl et al. has superior fire retarding properties (col. 5, lines 62-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adjusted the fuel content of the asphalt compositions to determine the fuel content that yields the optimum fire resistance to achieve fire resistant asphalt compositions depending on the desired end user result, since it has been held that discovering an optimum value of a result effective

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variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9. Claims 23 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. (USPN 5,096,759) in view of Kennepohl et al. (USPN 4,079,158) and in further view of McGroarty et al. (USPN 5,079,088).

Simpson et al. and Kennepohl et al. teach the material as discussed above.

McGroarty et al. disclose a waterproofing sheet (item 10) that is especially valuable for use on roofs, having an edge portion (item 13, Fig. 1) that is left without the layers that are coextensive over the remainder of the sheet (excluding edge portion, item 13) so that the sheets can be lapped so that the sheets, when installed, provide a continuous impervious layer (col. 2, line 49-col. 3, line 11 and Fig. 1 and 2). Furthermore, McGroarty et al. teach that the decorative surface area (the membrane, item 10, Fig. 1, col. 4, lines 51-52) is wider than the surface area of the adhesive waterproofing layer (item 11, col. 4, lines 55-60) that corresponds to the adhesive surface area of Simpson et al. Therefore, one of ordinary skill in the art would have recognized to have coated the adhesive surface area of Simpson et al. such that the upper surface of the substrate of Simpson et al. is wider than the surface area of the parting agent covered surface area as taught by McGroarty et al. in order to enable strips of the covering material to be lapped together so that the sheets, when lapped together, provide a continuous impervious layer as taught by McGroarty et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have coated the adhesive surface area of Simpson et al. such that the upper surface of the substrate of Simpson et al. is wider than the surface area of the parting agent covered

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surface area as taught by McGroarty et al. in order to enable strips of the covering material to be lapped together so that the sheets, when lapped together, provide a continuous impervious layer as taught by McGroarty et al.

# Response to Arguments

- 10. Applicant's arguments presented on pages 13-15 of the submission filed December 16, 2005 regarding the 35 U.S.C. 102 rejection of claims 21, 22, 24 and 29 have been fully considered but are not persuasive. Applicant argues that Simpson et al. does not teach or suggest "providing an edge region of the substrate 92 with an upper and a lower surface free of both the first and second asphalt compositions" (page 15, lines 4-7) because "the lower surfaces of the substrate 92 is covered with adhesive layer 94" (page 14, first sentence of second full paragraph), but the adhesive of adhesive layer 94 is not an asphalt composition. Clarification as to how the fact that "the lower surfaces of the substrate 92 is covered with adhesive layer 94" supports

  Applicant's argument that Simpson et al. does not teach or suggest "providing an edge region of the substrate 92 with an upper and a lower surface free of both the first and second asphalt compositions" is requested.
- 11. Applicant's arguments presented on page 15 of the submission filed December 16, 2005 regarding the 35 U.S.C. 103 rejection of claims 25-28 and 31 have been fully considered but are not persuasive. Applicant's arguments depend upon Applicant's arguments regarding the 35 U.S.C. 102 rejection of claims 21, 22, 24 and 29 that have been addressed above.
- 12. Applicant's arguments presented on pages 15-16 of the submission filed December 16, 2005 regarding the 35 U.S.C. 103 rejection of claim 23 have been fully considered but are not persuasive. Applicant's arguments do not address the rejection of record. Applicant has not

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explained how Applicant's allegation that edge portion 13 "is, and could ONLY be, disposed on the bottom surface of the membrane 10..." addresses the rejection of record. Applicant's statement that "the waterproofing layer 11 MUST be on the bottom surface of the membrane 10 in order to properly function as intended" is unsupported at least partly because Applicant has not provided support for what the intended function is limited to.

#### Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh

06/19/06

NBA

SUPERVISORY PATENT EXAMINER

6/20/06